

Remark

Applicant respectfully requests reconsideration of this application as amended. Claims 1 and 6-7 have been amended. No claims have been cancelled. Therefore, claims 1-23 are present for examination.

Claim Objections

Claim 1 is objected to for a syntax error. The claim is amended to correct the error. Applicants thank the Examiner for this attention to detail.

35 U.S.C. §103 Rejection

Sullivan Reitmeier and Ishibashi

The Examiner has rejected claims 1-2, 4-9, 11-19, and 21-23 under 35 U.S.C. §103(a) as being unpatentable over Sullivan, U.S. Patent Publication No. 2004/0012718, in view of Reitmeier, U.S. Patent No. 6,118,498 ("Reitmeier"), in further view of Ishibashi, U.S. Patent No. 6,721,832 ("Ishibashi").

As to Sullivan, the Examiner summarizes the basic configuration of the conventional microcomputer of Sullivan in which two tuner cards and a video card are coupled to a PCI bus. The Examiner then makes several statements which do not quite meet the claim limitations nor comport with the reference; "generalized instructions (i.e. Electronic Program Guide) is generated by the graphics controller for controlling the first and second tuners;" "to send the instructions to the microcontroller through PCI bus 220; the instructions being generated in a third protocol;" "graphics controller 227 switches to

a second video source;" "the microcontroller receives the generalized instructions from the graphics controller in the third protocol."

With these statements, the Examiner would appear to be suggesting that the graphics controller, a conventional PCI video card as far as a reader can tell, controls the two tuner cards and does this through the processor 202 using the PCI bus. This would be a radical departure from conventional computer operations and would require a clear disclosure, if true. In a typical system such as the one shown in Figure 2, the video card has the sole function of rendering video to the display as commanded by the processor. The video card does not send any instructions or control back to the processor. User inputs are received by the processor through keyboard and mouse controller 244, 245 through the ISA bus 230. If any of the user inputs affect the display, then the processor sends appropriate commands to the video card.

A normal operation to change channels would have the processor 202 generate a an interface for the Electronic Programming Guide. This would be rendered by the graphics card 227 for the display 128. The user would supply a mouse command through the user interface 244 to change channels. The processor would receive this command and then send an appropriate command through the PCI bus 220 to the tuner 110. The video supplied to the video card would change and the video card would continue to render what it was rendering.

The Examiner has cited a few portions of Sullivan to support the suggestion that in Sullivan, the video card controls the process, not the user interface and the processor as would be expected, specifically paragraphs 20 -22.

Paragraph 20 includes a statement: "When graphics controller 227 switches to a second video source, the output from the second video source is provided by graphics controller as a second video stream 314 over a second period of time." This does not state that the graphics controller controls the tuner card but rather that the graphics controller switches from receiving one source to receiving another source.

Paragraph 21 describes a method that includes switching video and displaying video, however, there is no explanation of where or by what component these operations are performed.

Paragraph 22 describes a method that includes detecting the type of program that a user is watching and then selecting an appropriate advertisement to insert in between channel changes. The actor is the video system 100 which refers to all of Figures 1 and 2.

Referring specifically to the Examiner's statements, Applicants find no support in Sullivan to support the assertion that the EPG is generated by the graphics controller. Therefore it must be assumed that the EPG is generated by the processor and rendered by the graphics controller.

Applicants further find no support in Sullivan for the assertion that the graphics controller controls the first and second tuners. Sullivan states that the graphics controller "switches" but such a switch does not require any action or control over the tuners. Therefore, it must be assumed that the processor commands the tuners based on user input or software and that the processor also control the graphics controller to make it switch.

Applicants further find no support in Sullivan for different protocols. There are different video streams, but no different protocols. Absent a clear teaching to the contrary, it must be assumed that Sullivan's video streams are all in the same format but carry different data.

Referring to Claim 1, it recites, *inter alia*, "the microcontroller ... to receive the generalized instructions from the graphics controller [the Examiner has identified no explicit instruction from the graphics controller of Sullivan] in the third protocol [the Examiner has identified no protocol for instructions from the graphics controller of Sullivan], to identify a tuner to which each instruction is directed [the Examiner has identified no explicit instruction from the graphics controller of Sullivan that identifies a tuner], to convert the instructions from the third protocol to the protocol for the identified tuner [the Examiner has identified no explicit instruction conversion by the processor of Sullivan], and to transmit the converted commands to the respective identified tuner through the respective control line interface of the respective tuner."

Reitmeier is further cited to overcome a few of the shortcomings of Sullivan. It appears that Reitmeier is cited to show "a control line interface" as claimed. However, Reitmeier shows only a single controller 70. Accordingly, there is none of the connection between a microcontroller and a graphics controller as claimed. Reitmeier further does not show two tuners that use two different protocols. Comparing the two paragraphs of Column 3, lines 34 to 57 reveals that the two tuners are identical in all respects. Reitmeier has no clear teaching of different protocols or different tuners. Reitmeier further has no clear teaching of using different protocols, nor of instructions being received by a microprocessor from a graphics controller.

The Examiner states that Reitmeier shows a second tuner 10B with a control line interface "to receive commands in a second protocol different from the first protocol and specific to the second tuner..." However, no support is provided for this assertion and there is no such teaching in the reference. The cited section of the reference at Col. 3, lines 34-48 reveal that the two tuners are essentially identical.

Ishibashi is cited to show the conversion of protocols from that of the graphics controller to that of the tuner cards, even though Ishibashi shows neither a graphics controller nor different tuner cards. In addition all of the commands referred to by the Examiner are PCI commands. It is difficult to see how anything is converted from one protocol to another when it is all within the PCI standards and interfaces.

Figure 3, cited by the Examiner shows different commands in their binary form next to a corresponding description. The reference does not teach that a command gets received in as either a digital code or a description and then gets converted to a description or digital command. The table simply shows the format of the commands on the PCI bus. The sum total of the relevance of this reference is that different PCI devices can have different addresses on the PCI bus. However an address is not a protocol.

Fundamentally, Sullivan fails as a primary reference for at least two important reasons. First, the two tuners in Sullivan are identical in terms of command protocol and output format. As a result, there is no need to convert protocols based on which tuner is commanded. Second, while Sullivan uses the term "graphics controller," this refers to a conventional video card that renders video based on commands from the processor. In the present application, the term "graphics controller" refers to a component that performs very different functions.

Reitmeier and Ishibashi fail to overcome these failings of Sullivan.

The cited combination does not show "a graphics controller to generate generalized instructions for controlling the first and second tuners." The cited combination does not show a "microcontroller... to receive the generalized instructions from the graphics controller." The cited combination does not show a microcontroller "to convert the instructions..." The cited combination does not show a second tuner "to receive commands in a second protocol..." Absent these significant teachings, the rejection is, respectfully, traversed.

While the arguments above are applied only to Claim 1, they apply also to the other independent claims. The dependent claims are believed to be allowable for their dependence on an allowable independent claim as well as for additional recitations set forth expressly in each such claim, respectively.

35 U.S.C. §103 Rejection

Sullivan Reitmeier, Ishibashi and Nickum

The Examiner has rejected claims 3, 10 and 20 under 35 U.S.C. §103(a) as being unpatentable over Sullivan, Reitmeier, Ishibashi, and in further view of Nickum, U.S. Patent Publication No. 2004/007880 ("Nickum"). Nickum is not cited for and does not show the limitations absent from the primary combination as described above.

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicant respectfully requests the rejections be withdrawn and the claims as amended be allowed.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

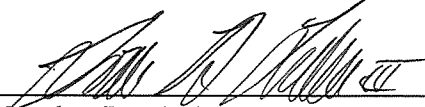
Request for an Extension of Time

Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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